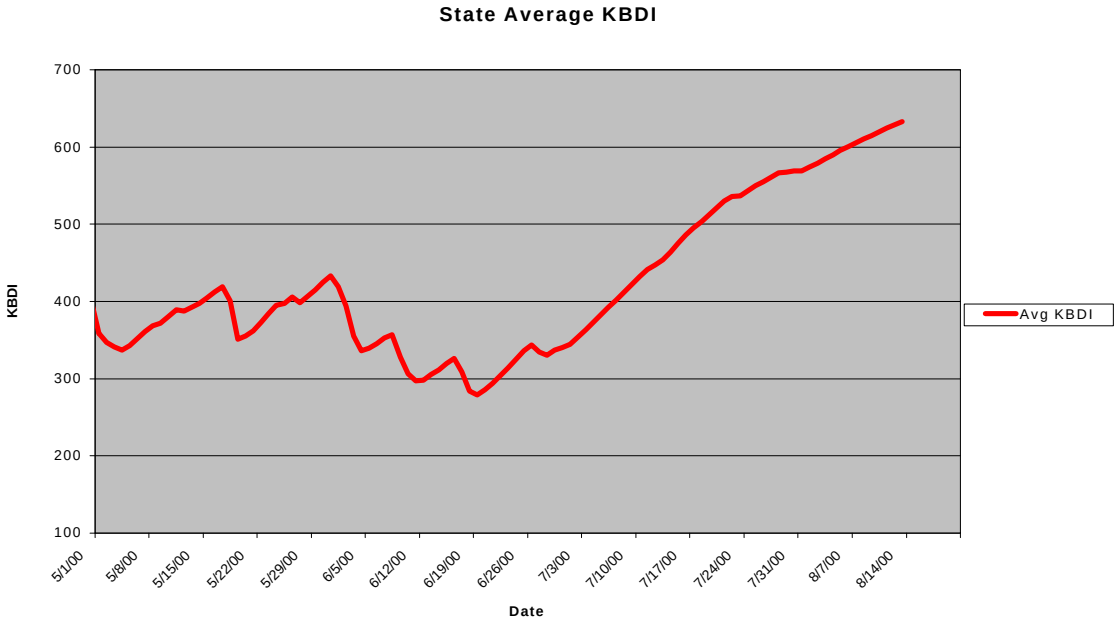
TEXAS FOREST SERVICE
The Texas A&M University System

Fire Risk Assessment Update

August 2000

The fire risk potential across the state has steadily increased throughout the summer months. Near record heat associated with an entrenched high-pressure system, is the primary reason for this trend. Areas of the state most impacted, have been Central Texas, North Central Texas, Northeast Texas, and Southeast Texas. Cities within these areas include Austin, Waco, Dallas, Fort Worth, Decatur, Wichita Falls, Tyler, Lufkin, Woodville, Houston, and Conroe. The average Keetch-Byram Drought Index for the state has now moved above the 600 level for the first time this year, as shown in the accompanying chart.



This indicates that the bulk of the state is now in the extreme fire risk potential range. East Texas, Central Texas, and North Central Texas have all been above 600 since the middle to end of July. If this trend continues, the state average could reach the 700 level within four weeks.

The extended weather forecast indicates that more of the same (hot & dry) is in store for most of the state on into late summer or early fall. If so, then fire risk potential will continue to worsen throughout North Central, Central, and East Texas during this period. The area effected can also be expected to expand, to include more of the Hill Country and Rolling Plains regions of the state. Cities that may be impacted include San Angelo, Abilene, Fredricksburg, and Childress.

The continued hot and dry weather has combined to produce tinder dry vegetation in the four hardest hit areas, that will easily ignite and burn with high intensity. The large fuel (dead branches and tree trunks) and live fuel (the percent moisture in the growing part of a plant) moistures are now below critical thresholds. With these conditions in place, expect the intensity of fires to increase. Without the buffering effect of live fuel moisture combined with the hot and dry weather, wildland fires can be expected to burn hotter, grow larger, and be harder to control.

Where winds are above 10 mph, and relative humidities below 25%, the potential for a large and destructive wildland fire is present. Fire of this type will require multiple firefighting resources to contain.

All firefighting personnel and citizens in the effected areas need to be advised of these deteriorating conditions, and the danger they pose.

Citizens are advised to limit as much as possible, activities that could lead to an accidental start of a wildland fire.

Firefighters are advised to recognize the potential for extreme fire behavior, and plan their control operations accordingly.

Tom Spencer
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